UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,656	11/27/2001	Luis F. Cabrera	003797.00214	8108

28319 7590 11/29/2005		EXAMINER
BANNER & WITCOFF LTD., ATTORNEYS FOR MICROSOFT 1001 G STREET , N.W. Suite 1100 WASHINGTON, DC 20001-4597		TRUONG, LECHI

ART UNIT	PAPER NUMBER
2194	

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/993,656	CABRERA ET AL.
	Examiner	**Art Unit**	
	LeChi Truong	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>23 March 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-46</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-46</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

         1.☐ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____.

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-46 are presented for the examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

2.   Claims **1-5, 7, 29-31** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Martino (US. Patent 5,680,551).

3.   **As to claim 1**, Martino teaches the invention substantially as claimed including: a

message dispatcher (router, col 6, ln 19-21/ col 7, ln 4-12), messages (states of message and data,

col 6, ln 19-21/col 7, ln 4-12), each message is routed based on an arbitrary portion of the

message's contents (col 2, ln 32-36/ col 7, ln 4-12/ col 18, ln 24-31/col 17, ln 1-9), an interface

(EMS, col 2, ln 32-36/ commit API, col 6, ln 45- 50/ col 18, ln 20-25), an interface through

which application programs communicate with the message dispatcher to define the arbitrary

portion of the message's content(when the EMS router receives a commit from the next hop

destination, it update the status of the next message in the QEB for the message is now complete.

If the message has an EMH destination node... if message is complete, the EMS Router removes

the related message from its queues, col 18, and ln 20-28). Martino does not explicit teach the

term dispatches. However, Martino teaches transmission, delivery (col 7, ln 4-10). It would have

been obvious to one of the ordinary skill in the art at the time the invention was made that in fact

Martino's transmission and delivery is equivalent to applicant dispatches.

4.   **As to claim 2,** Martino teaches a transport independent message dispatcher (col 4, ln 15-

20/col 7, ln 25-29/ln 30-34/col 12, ln 4-8), transport independent protocol (col 2, ln 37-45/col 5,

ln 30-35/ col 12, ln 17-20/ col 12, ln 32-38).

5.   **As to claim 3,** Martino teaches a first/ second network message (messages, col 11, ln 60-

67), the first/second attribute of said first/second network message (an EMH destination node,

col 18, ln 24-32), a first /second network (the appropriate communication agent is agent is

selected, col 12, ln 9-11).

6.   **As to claims 4,** Martino teaches a first/ second network message (messages, col 11, ln

60-67), the first/second attribute of said first/second network message (an EMH destination node,

col 18, ln 24-32), a first /second network (the appropriate communication agent is agent is

selected, col 12, ln 9-11), a first /second sender, col 6, ln 3-6).

7.   **As to claim 5,** Martino teaches a virtual network protocol above a transport layer

protocol (col 4, ln 15-20/col 7, ln 25-29/ln 30-34/col 12, ln 4-8).

8.   **As to claim 7,** Martino teaches the arbitrary portion of the message's contents comprises

an applicant level header (col 8, ln 17-20/col 9, ln 20-25/col 10, ln 28-31).

9.   **As to claim 29,** Martino teaches routing information (acknowledgement message, col 16,

ln 33-65), storing routing information received from a network application (col 17, ln 1-10/ col

18, ln 20-30), a message field, a field condition and a routing instruction (col 16, ln 45-65), a

network message (the original outgoing message, col 17, ln 1-9), processing the network

message by comparing the network message to the stored routing information (col 17, ln 1-9),

when the received message's message field meets the field condition performing the routing

instruction(col 18, ln 25-33). Martino does not explicit teach the term receiving network

message. However, Martino teaches receiving network message (message/data querying and

communication services separates from the application program, col 2, ln 16-21). It would have

been obvious to one of the ordinary skill in the art at the time the invention was made to apply

the teaching of Martino because Martino's message/data querying and communication services

separates from the application program would enable the communication over one or more

transport facilities as desired providing for user within a multimedia, multi-platform and multi-

network computing and communication environments.

10.   As to claim 30, Martino teaches routing instruction comprises altering the message (col

7, ln 30-35).

11.   As to claim 31, it is an apparatus claim of claim 7; therefore, it is rejected for the same

reason as claim 7 above.

12.   Claims **6, 8-28 and 32-33** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Martino (US. Patent 5,608551) in view of Narisi et al (US. 6,233,619 B1).

13.   As to claim 6, Martino does not teach a transport adapter, a transport adapter to convert

message between the transport layer protocol and the virtual network protocol. However, Narisi

teaches a transport adapter between the transport layer protocol and the virtual network protocol

(Messaging subsystem (MSS), col 18, ln 35/ col 13, ln 13-19), convert (col 26, ln 38-42/col 22,

ln 25-31).

14.   It would have been obvious to one of the ordinary skill in the art at the time the invention

was made to combine the teaching of Martino and Narisi because Narisi's messaging subsystem

would improve the flexibility of Martino and Narisi's systems by providing an interface which

is independent of a communication protocol and a virtual transport layer such as TCP/IP to the

network application.

15.   **As to claim 8,** Martino teaches a message dispatcher (router, col 6, ln 19-21/ col 7, ln 4-

12), messages (states of message and data, col 6, ln 19-21/col 7, ln 4-12), an interface (commit,

col 18, ln 10-31), an interface through which application programs communicate with the

message dispatcher (col 18, ln 20-31), stored rules (configuration files, col 7, ln 46-57/ EMS

message header, col 10, ln 28-57/col 11, ln 59-67/a network acknowledgement message, col 17,

ln 1-10), route a first/ second network message based on a first/second attribute of said network

message(col 7, ln 4-12/ col 18, ln 24-31/col 17, ln 1-9), different from said first attribute since

messages are routed to different network protocol or different destinations(col 6, ln 21-25/col 9,

ln 20-25), the first and second attributes are selected from and contained in each network

message(col 18, ln 24-32) and Narisi teaches a transport adapter (Messaging subsystem (MSS),

col 18, ln 35/ col 13, ln 13-19), a set of header in each network message (header information

associated with the data, col 3, ln 62-67).

16.   **As to claim 9,** Narisi teaches the first attribute comprises an application created header

(col 3, ln 62-67).

17.   **As to claim 10,** Martino teaches each message rule is stored in a message hander (col 7,

ln 47-58).

18.   **As to claim 11**, Martino teaches a predetermined condition (col 7, ln 50-58), alters a

second message hander (col 9, ln 10-14).

19.   **As to claim 12**, Narisi teaches upon the occurrence of a predetermined condition alters

the first message (col 38, ln 59-61).

20.   **As to claim 13**, Narisi teaches a nonccurent of an event (col 26, ln 40-43).

21.   **As to claim 14**, Martino teaches polling a second apparatus in first predetermined

intervals and receiving poll responses from the second apparatus (col 15, ln 51-64/ col 16, ln 33-

40), the predetermined condition comprises the nonoccurrence of step for a predetermine amount

of time (col 20, ln 34-41/ col 23, ln 33-40).

22.   **As to claim 15**, Martino teaches when the predetermined condition is met, the message

dispatcher alters the second message handler to redirect message (col 7, ln 20-29).

23.   **As to claim 16**, Martino teaches sending routing information to a second message

dispatcher indicating the change of routing information (col 7, ln 55- 58/ col 9, ln 20-25).

24.   **As to claim 17**, it is an apparatus claim of claim 8; therefore, it is rejected for the same

reason as claim 8 above.

25.   **As to claim 18**, Martino teaches receiving instruction comprising a message field and a

field condition (col 17, ln 1-9), modifying a message handler based on the received instruction

(col 17, ln 40-49/ col 4, ln 14-20/ Fig. 4).

26.   **As to claim 19**, Martino teaches the instructions are received from a network application

program (col 18, ln 20-25).

27.   **As to claim 20**, Martino teaches the instructions are based on the user input (col 7, ln 10-

14/ ln 49-45).

28.   **As to claims 21, 22,** they are apparatus claims of claims 6, 7; therefore, they are rejected

for the same reasons as claims 6, 7.

29.   **As to claim 23,** Martino teaches storing routing instructions in message handlers (col 17,

ln 45-50), perform based on stored message handlers (col 18, ln 10-32).

30.   **As to claims 24-28,** they are apparatus claims of claims 18, 12, 13, 14, 15, 16; therefore,

they are rejected for the same reasons as claims 18, 12, 13, 14, 15, 16 above.

31.   **As to claim 32,** it is an apparatus claim of claim 8; therefore, it is rejected for the same

reason as claim 8 above. In additional, Narisi teaches a plurality of computer (a series 10 and 48,

Fig. 2), each computer routes messages in the virtual network protocol over the transport layer

protocol using the at least one transport adapter (col 18, ln 35/ col 13, ln 13-19).

33.   **As to claim 33,** Narisi teaches a new transport adapter that convert message between the

new transport layer protocol and the network protocol (col 18, ln 35/ col 13, ln 13-19/ col 14, ln

14-20), without requiring a network application to be reconfigured for use with the new transport

protocol (col 17, ln 40-44/col 18, ln 20-25/col 26, ln 22-28).

34.   Claims **34-42 and 46** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Sheard et al (US. Patent 6,453,356 B1) in view of Narisi et al (US. 6,233,619 B1).

35.   **As to claim 34,** Sheard teaches virtualized component (the data exchange engine 62 with

a routing module 66 and business logic module 68, col 9, ln 66-68 to col 9, ln 12-15/ Fig. 2),

network service (col 8, ln 1-5). Sheard do not teaches OSI protocol stack. However Narisi

teaches an OSI protocol stack (col 13, ln 13-20/ col 14, ln 13-20).

36.   It would have been obvious to one of the ordinary skill in the art at the time the invention

was made to combine the teaching of Sheard and Narisi because Narisi's OSI protocol stack

would improve the efficiency of Sheard and Narisi's systems by improve the efficiency of

Sheard and Narisi's systems by providing an interface which is independent of a communication

protocol and a virtual transport layer such as TCP/IP to the network application.

37.   As to claim 35-42, Sheard teaches virtualized component comprise a virtual network

message dispatcher to route message according to virtual names and locations/a synchronization

module to ensure that distributed data / an event module to create new routing, and dispatch/ a

name modules to provide name/ a groups module to manage name mapping table/ an addressing

module /a security module/an administrate module (col 10, ln 52-57/col 11, ln 10-15/ ln 28-32/

ln 33-40/ ln 50-55/ col 12, ln 7-13/ ln 17-23/ col 13, ln 50-55).

38.   As to claim 46, Sheard teaches a virtual message dispatcher (routing logic/ user-specified

routing logic may be applied by the data exchange engine to dispatch selected informational, col

3, ln 1-5), messages (the exchange of required portion of informational content 'A', col 5, ln 47-

50), appropriate application at their intended destination (application #2, col 5, ln 41-45/ ln 65-67

to col 6, ln 2-10/ Fig. 1/ the information provider #2 systems environment / the three destination

applications, col 9, ln 5-11), a virtual message dispatcher that routes messages to intended

destinations and dispatches message to appropriate applications at their intended destination(col

3, ln 1-5/ col 5, ln 6, ln 5-16), an arbitrary portion of the message contents(the content of a

particular data streams, col 9, ln 1-5/ selected portion of data stream A1, col 9, ln 5-10), each

message is handed based on an arbitrary portion of the message contents (col 8, ln 65-67 to col

9, ln 1-7), an interface(the data change engine 62 , col 8, ln 65-67), an interface through with

application programs communicate with the message dispatcher to define the arbitrary portion of message's contents by which each message is handled(the data exchange engine 62 cooperates with a routing logic module 66 to determine one or more destination application within the information provider#2 that require particular data streams from information provider#1. It is noted that the content of a particular data stream, such as data stream A1, may have been requested by more than one information provider#2, col 8, ln 65-67 to col 9, ln 1-12/ ln 13-18), a transport adapter (the adapter, col 5, ln 47-53/ col 6, ln 3-12), a adapter for converting message between a virtual network protocol used by network applications and a transport protocol used by the computer network (adapters reformulates the information content 'A' from the common representation to type 'D' format suitable for incorporation by application #4, col 6, ln 5-10/ dissimilar data is intended to refer to the data types that differ in term of format, structure, protocol, content and the like, col 4, ln 55-58/ col 5, ln 22-35/ col 13, ln 1-8/ col 70, ln 60-65), the virtual message dispatcher is configurable for use with a second transport protocol by adding a second transport adapter(col 9,ln 39-45), without requiring any network application to be reconfigured for use with the second transport protocol(col 9, col 27-32/ col 3, ln 1-6), and Narisi teaches OSI layer (col 13, ln 13-20/ col 14, ln 13-20).

39.   Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martino (US. Patent 5,608551) in view of Narisi et al (US. 6,233,619 B1) and further in view of Sheard et al (US. Patent 6,453,356 B1).

40.   **As to claim 43,** Martion and Narisi do not teach adding a new message hander to route

message based on a newly created type of message header. However, Sheard teaches adding a

new message hander to route message based on a newly created type of message header (col 9, ln

28-32/ ln 39-45).

41.   It would have been obvious to one of the ordinary skill in the art at the time the invention

was made to combine the teaching of Martion, Narisi and Sheard because Sheard's adding a new

message hander to route message based on a newly created type of message header would

improve the efficiency of Martion and Narisi's systems by providing enhanced scalability,

expandability, and flexibility to meet current and future information exchange requirements.

42.   Claims **44, 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Martino

(US. Patent 5,608551) in view of Narisi et al (US. 6,233,619 B1) and further in view of Holmes

(US. Patent 5,935,219).

43.   **As to claim 44, 45,** Martino and Narisi do not teach the first and second attributes

corresponds to a geographic location of sender of the message/ a class of service of the sender of

message. However, Holmes teaches the first and second attributes corresponds to a geographic

location of sender of the message/ a class of service of the sender of message (col 3, ln 30-35).

44.   It would have been obvious to one of the ordinary skill in the art at the time the invention

was made to combine the teaching of Martion, Narisi and Holmes because Holmes's the first and

second attributes corresponds to a geographic location of sender of the message/ a class of

service of the sender of message would improve the flexibility of Martino and Narisi's systems

by allowing a way of gaining the speed of a direct call for intrathread message.

Response to the argument:

44.   Applicant amendment filed on 9/03/04 has been considered but they are not persuasive:

Applicant argued in substance that :

(1) " Martion, however, does not teach or suggest the routing of messaes based on an

arbitrary portion of the message's contents, nor does Martino teach or suggest an interface

through which application programs communicate with the message dirspatcher to define the

arbitrary portion of the message's content".

45.   Examiner respectfully disagreed with Applicant's remarks:

As to the point (1), Mariton teaches EMS trasks the status of a message, and, depending

on the facilites on the receiving side, can guaratee delivery to the destination application, col 2,

ln 33-36/ determine wherthe the given message specifices an acknowledgment and if so, sending

an acknowledge message to the sending entiy, (col 30, ln 8-16)/ when the EMS router receives a

commit from the next hop destination, it update the status of the next message in the QEB for the

message is now complete. If the message has an EMH destination node... if message is

complete, the EMS Router removes the related message from its queues (col 18, ln 20-28). The

API commit is an interface; the next hop destination is application program.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to LeChi Truong whose telephone number is (703) 305 5312. The

examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng-Ai An can be reached on 703-305-9668. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR of Public PAIP. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIP

system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

November 1, 2005

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100